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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,810	02/18/2004	George Plester	01638.0014.NPUS01	6837
22930	7590	01/08/2007		
HOWREY LLP C/O IP DOCKETING DEPARTMENT 2941 FAIRVIEW PARK DR, SUITE 200 FALLS CHURCH, VA 22042-2924			EXAMINER TRUONG, THANH K	
			ART UNIT	PAPER NUMBER
			3721	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/08/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/779,810

Applicant(s)

PLESTER, GEORGE

Examiner

Thanh K. Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19, 66 and 68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19, 66 and 68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 8, 2006 has been entered.
2. Applicant's cancellation of claims 20-65, 67, 69 and 70 is acknowledged.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4-10, 12-17, 19, 66 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drevfors (6,256,964) in view of Helmut (5,860,461).

Drevfors discloses a method comprising the steps of:

filling the inside of the package (1) with a sterilizing vapour (column 4, lines 42-44);

holding the sterilizing vapour on the inside of the package for a sufficient amount of time to sterilize the inside of the package (column 4, lines 44-47);

moving the package to a filling location with the sterilizing vapour inside the package (it is construed that the filling location comprises station D and station E as discloses in Fig. 1 of Drevfors)

removing a portion of the sterilizing vapour (column 4, lines 50-54);

filling the package with a product at the filling location (column 4, lines 56-58); and

capping the filling aperture of the package containing the product (column 4, lines 61-63).

Drevfors discloses the claimed invention, but does not expressly disclose the membrane fitted over the filling aperture.

Helmut discloses the membrane fitted over the filling aperture the membrane being configured to be disposed in a first position in which the membrane is substantially impenetrable to vapour and a second position in which the membrane has been displaced to permit the insertion of an elongated member into the package (figures 5, 6 & 10 and column 2, lines 60-63). Helmut method provides "a container of a sealing cap and a process which aseptic filling of beverages is possible at an acceptable level of engineering complexity and cost" (column 2, lines 24-28).

Therefore, it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified Drevfors method by incorporating the method of using the membrane as taught by Helmut to provide a method in which aseptic filling of beverages is possible at an acceptable level of engineering complexity and cost.

The combining of the references (Drevfors and Helmut) further discloses:

the step of allowing a sufficient quantity of the sterilizing vapour to exit the package before filling the package with a product to avoid affecting the quality of the product, wherein the sterilizing vapour exits the package and sterilizes a part of a filling device that comes into contact with the product (Helmut - column 4, lines 37-42);

the membrane opens to greater than about 10% of the area of the filling aperture during the filling steps (Helmut – figure 5);

displacing the sterilizing vapour with sterile air (sterile gas as in claim 6), wherein the sterile air forms a headspace of the capped package (column 8, lines 1-8);

pressing the membrane segments tightly against inner walls of the package to accelerate displacement of the sterilizing vapour by eliminating the gap between membrane segments and the inside of the package (Helmut – figure 5);

the step of conveying the package between the filling steps and the capping step in a non-sterile atmosphere, wherein the inside of the package remains substantially free of microbiological contamination (figure 1 of Drevfors clearly shows the processing plant 3 is a non-sterile atmosphere) (as in claim 9);

the step of wetting the membrane with a fluid, wherein the wetted membrane has increased ability to prevent entry of contaminants;

heating the package wherein the heating increases the internal pressure of the gas in the package, and enhances prevention of entry of contaminants into the package (Helmut – column 4, lines 17-19);

using conventional non-aseptic filling equipment adapted to fill aseptically; wherein the non-aseptic filling equipment is used aseptically part time;

the step of sterilizing an outside surface of the membrane before the capping step; wherein the step of sterilizing an outside surface of the membrane is achieved with a sterilizing medium that does not affect the quality of the product in small amounts (Helmut – column 4, lines 22-24);

the step of sterilizing the parts of the filling device that come in contact with the product to be filled between filling operations by spraying with chlorinated water, by sterilizing vapour (Helmut – column 4, lines 37-42);

conveying the package from a location for filling the package with a sterilizing vapour to a filling location, the package having the sterilizing medium substantially sealed inside of the package while the package is being conveyed (Drevfors - figure 1); disposing a cap over the membrane, whereby the membrane becomes interal to the cap after the cap is disposed over the membrane (Helmut – figure 10); and the step of moving the package after the package is filled with sterilized vapour, the movement of the package occurring while the sterilizing vapour is being held inside of the package and while the membrane is disposed in the first position (Drevfors - figure 1).

5. Claims 3, 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drevfors (6,256,964) in view of Helmut (5,860,461) as applied to claims 1 and 10 above; and further in view of Applicant Admitted Prior Art.

As discussed above in paragraph 4 of this office action, the combination of the references discloses the claimed invention, but did not expressly disclose that: the membrane material is an elastomer selected from the group consisting of silicone

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rubber, natural rubber, etc, wherein the fluid contains a thickener to increase the viscosity of the fluid, and the step of rinsing the parts of the filling device that come in contact with the product to be filled with hot water after each filling step.

Applicant Admitted Prior Art teaches that it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have used membrane that is made out of natural rubber to provide the elastic property to the mechanical sealing device (furthermore, Helmut discloses the use of elastic material – column 5, lines 65), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416; and

that it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made to have made the fluid contains a thickener to increase the viscosity of the fluid, since it is old and well known in the art to add thickener to increase the viscosity of the fluid (common sense); and

that it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made to rinse the parts of the filling device that come in contact with the product to be filled with hot water after each filling step to ensure the equipment is thoroughly sterilize in the process.

### ***Response to Arguments***

6. Applicant's arguments filed October 11, 2006 have been fully considered but they are not persuasive.

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7. In response to the Applicant's argument that:

*"Drevfors discloses that a "vertically reciprocating pipe 9 is fed down into the opening of the packaging container and is connected to the source of sterilization agent, e.g. gas or spray-form hydrogen peroxide." See col.4, 11.41-44. Next, "the pipe 9 is removed and the packaging container is displaced to station D, where the pipe 10 is, in a corresponding manner, displaced down into the opening of the packaging container and is connected to a source of hot sterile air. Hereby, the sterilization agent will, in a known manner, be vaporized and depart from the interior of the packaging container." See col.4, 11.46-52. Finally, "[a]fter completed sterilization, the pertinent packaging container is displaced to station E, where a vertically movable filler pipe 11 is lowered into the packaging container and connected to a source of the intended contents" and filled. See col.4, 11.54-58. Thus, Drevfors discloses that the steps of removing the sterilizing vapour and the step of filling the package with "intended contents" are performed at separate locations. Claim 1 of the present invention, on the other hand, recites that the steps of removing the sterilizing vapour and filling the package occur at the same location (i.e., the "filling location)" (emphasis added),*

the above argument is not found persuasive, because:

The rejection as presented above in paragraph 4 of this office action, construes that the filling location comprises station D and station E as discloses in Fig. 1 of Drevfors, and moreover, claim 1 as recited does not exclude the container being moved while it is in the filling location. In other words, the container is not required being stationary while it is in the filling location. Therefore, the examiner maintains that in combination, Drevfors and Helmut clearly disclose the claimed invention.

### **Conclusion**

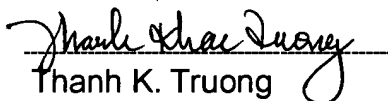
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh K. Truong whose telephone number is 571-272-4472. The examiner can normally be reached on Mon-Thru 8:00AM - 6:30PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Thanh K. Truong  
Patent Examiner  
January 2, 2007.